

**BEFORE**  
**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION**

**PETITION NO. -----**

**PETITIONER:** CHHATTISGARH STATE POWER TRANSMISSION  
COMPANY LTD, **3<sup>rd</sup> FLOOR, SEWA BHAVAN,**  
**RAIPUR.**

**In the matter of:**

Approval of CAPITAL INVESTMENT PLAN for the period from FY  
2021-22

December 2020

Chief Engineer (Commercial & Regulatory Affairs)

CSPTCL: Raipur

# Introduction

Chhattisgarh State Electricity Board (CSEB) was a part of the erstwhile Madhya Pradesh Electricity Board (MPEB) till 2000. It became a separate entity on the formation of the State of Chhattisgarh. The Board functioned as unified entity till December 2008 when the State Government notified a transfer scheme in pursuance of the provisions of part XIII (Sections 131 and 133) of the Electricity Act, 2003 for unbundling it with effect from 1 January 2009. The transfer scheme resulted in the formation of five successor entities for undertaking the functions of the erstwhile Board viz.

- a. Chhattisgarh State Power Holding Company Limited (CSPHCL)
- b. Chhattisgarh State Power Generation Company Limited (CSPGCL)
- c. Chhattisgarh State Power Transmission Company Limited (CSPTCL)
- d. Chhattisgarh State Power Distribution Company Limited (CSPDCL)
- e. Chhattisgarh State Power Trading Company Limited (CSPTraCL)

The functions of generation, transmission, distribution and trading have been allocated to the respective successor entities. All these companies have been envisaged as the wholly owned subsidiaries of Chhattisgarh State Power Holding Company Limited. Chhattisgarh State Power Transmission Company Limited (CSPTCL) as mentioned above has been formed for undertaking the 'transmission function' of CSEB. CSPTCL started operations on 1<sup>st</sup> January 2009. As per Section 39 of Electricity Act, 2003, CSPTCL being a STU is responsible for the following broadly activities:

- a. To undertake transmission of electricity through intra-state transmission system
- b. To discharge all functions of planning and coordination related to intra-state transmission system
- c. To ensure development of an efficient, coordinated and economical system of intra-state transmission line for smooth flow of electricity from a generating station to load center.
- d. To provide non-discriminatory open access of its transmission system for use by any licensee or generating company or any other consumer etc.

In Secretary, CSERC letter no.1228 dated 26.11.2020, it is stated that “ it would be prudent to extant MYT regulation 2015, for next year i.e. FY 2021-22. Accordingly, the Generating Company(s) and licensee(s) be informed to file the tariff petition for FY 2021-22 before 31/12/2020 by adopting the principle of MYT regulation 2015”

CSPTCL had filed a petition no. 101 of 2015 (M) before Hon'ble CSERC for approval of Capital Investment Plan (in short CIP) for the control period FY 2016-17 to 2020-21. Hon'ble CSERC vide their order dated 26.03.2016 had approved the CIP in respect of CSPTCL.

Further, CSPTCL had filed a petition no. 66 of 2019 (M) before Hon'ble CSERC for approval of Additional Capital Investment Plan (in short Addl. CIP) for the control period FY 2016-17 to 2020-21. Hon'ble CSERC vide their order dated 30.04.2020 had approved the CIP in respect of CSPTCL.

Also as per request of CSPTCL, Secretary, CSERC vide letter no. 1120 dated 29.10.2020 has conveyed the approval of construction of 02 No. 132/33KV EHV substation along with its associated transmission line namely at Gullu (Arang) & Hanfa (Uslapur).

In the instant petition, capital works are to be carried out during FY 2021-22 is being proposed for approval of Hon'ble CSERC over & above what has been approved in above mentioned CIP, Addl CIP etc.

**1. BRIEF DETAILS OF CAPITAL INVESTMENT APPROVED THROUGH ORDER DATED 26.03.2016 & 30.04.2020:-**

2. Capital investment approved by Hon'ble CSERC vide their order dated 26.03.2016 in respect of CSPTCL CIP for FY 2016-17 to 2020-21 under various schemes are tabulated below :-

Particulars	Scheme Provision in Rs Crs	Expenditure Incurred up to FY 15	Capital Expenditure in Rs Crs Considered in Control Period					
			FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
<b>SPILL OVER WORKS</b>	1977.15	137.45	369.54	477.92	324.35	178.75	52.41	54.20
<b>NEW Normal Development Works</b>	1719.2	0	0	409	427	426.2	268	135
<b>TOTAL</b>	<b>3696.35</b>	<b>137.45</b>	<b>369.54</b>	<b>886.92</b>	<b>751.35</b>	<b>604.95</b>	<b>320.41</b>	<b>189.20</b>

3. During the filing of petition for additional CIP for FY 2016-2021, some of the work approved in the above CIP has been deferred and additional works to be carried out was proposed and accordingly Hon'ble CSERC has approved the addition CIP on 30.04.2020 with the following expenditure :-

Particulars	Approved Scheme Provision in Rs Crs
Total Scheme allowed in CIP order dated 26.03.2016	3696.35
Less, deferred capital works Scheme	397.50

Less, Scheme of 132KV Daldal seoni & its associated transmission line.	44.00
Less Scheme of 132KV Dharamjaygarh & its associated transmission line.	38.50
Total Scheme in additional CIP for FY 2016-21	2582.39
Total Scheme (as per 26.03.2016 order +as per 30.04.2020 order)	5978.74

**Remark:-**

- i- Total expenditure proposed for 220/132 KV substation Rakhi and its associated transmission lines of Rs. 132 Crs are included in the spillover scheme provision given in the table, however expenditure is allowed under the control period from FY 21 with completion target by beyond FY 21.

**4. Brief Progress of capital works approved under CIP FY 2016-21 :-**

**(a) Spill Over Works Scheme:-**

- i- Work of construction/commissioning of 400/220KV substation, Jagdalpur & its associated transmission lines has been completed and commissioned.
- ii- Total expenditure proposed for 400/220 KV substation Bilaspur and its associated transmission lines that is Rs. 325.01 Crs approved in Business Plan FY 2010-13 and kept under review is included in the spillover scheme provision in approved CIP FY 2016-21, however no expenditure is allowed under the control period for the same. However, in approved additional CIP, construction of 400/220 KV substation Bilaspur and its associated transmission lines with Rs 181 Crs is approved. For one no. 400KV line & two numbers 220KV lines amounting to Rs 144.01 Crs covered under this scheme, certain direction has been issued. Work of construction 400/220 KV substation Bilaspur and its associated transmission line shall be taken up shortly and shall be completed by on or before FY 2023-24.
- iii- Work of construction/commissioning of four no. 220/132KV substation at Gerwani, Borjhara, Jagdalpur & Narayanpur along with its associated transmission lines has been completed. Construction activities of one no 220/132KV substation at Rakhi could not be started due to reason that expenditure is allowed under the control period from FY 21 with completion target by beyond FY 21.

- iv- Out of 15 numbers 132/33KV substations, work of construction/commissioning of all the 15 numbers 132KV substation has been completed.

**(b) New Normal Development Works –**

- i- Work of construction of one number 400/220 KV substation, Kurud along with its associated transmission line has been completed.

- ii- Work of construction/commissioning of three no. 220/132KV substation at Dharsiwa, at Bilaspur & at Kawardha along with its associated transmission lines has been completed. One number 220/132KV substation Parsada along with its associated transmission lines has been deferred.
- iii- Out of 17 numbers 132/33KV substations, work of construction/commissioning of 08 numbers 132KV substation have been completed. From the remaining 9 nos. substations and its associated transmission lines, the status is as under:-
- a- Up-gradation of approved 2 nos. 132KV substation namely Daldalseoni & Dharamjaygarh to 220KV was proposed through Addl CIP petition. Commission has approved the same.
  - b- Two nos substations namely 132KV Nagarnar & Raoghat has been deferred.
  - c- Construction work of one number substation at Indagaon & its associated transmission line is under progress and shall be completed during FY 2021-22.
  - d- For balance 04 Nos substations namely at Chhawani(Bhilai), Baijalpur, Janakpur & Sarora Land acquisition, administrative approval, tender etc is under progress.
- iv- Other capital works related to system improvement works covered in spill over & new ND schemes like second circuiting of existing EHV lines, augmentation of transformers, commissioning of additional transformers etc, it is to state that some of them has been completed, few are under progress and for balance works are being taken up.

5. **Brief Progress of capital works approved under Addl. CIP FY 2016-21 :-**

- Work of construction of 05 Number 132/33KV substations namely at Udaipur, Indamara ,Khairagarh, Siltara-II & Kharmora approved in CIP has already been under progress and shall be completed by FY 2021-22.
6. All the capital works other than stated above which are proposed & approved through additional CIP FY 2016-21 shall be started after completion of tendering etc and shall be completed beyond FY 2020-21 i.e. on or before FY 2023-24.
7. All the balance capital works like construction of 400KV, 220KV & 132KV substations as well as system improvement works covered in CIP and Addl FY 2016-21 are to be carried out, shall be started during FY 2020-21 & FY 2021-22 and shall be completed by on or before FY 2023-24 and hence in CIP FY 2021-22, only system improvement works are being proposed through petition for CIP FY 2021-22 funds for which is needed in FY 2021-22 as per the requirement during FY 2021-22.

## 8. NEW Proposed Capital/ System Improvement Work :-

### System improvement works:-

- i- The proposal for enhancement and up gradation of communication network of CSPTCL for reliable communication of data & speech from EHV Substations to main and backup SLDC of Chhattisgarh using OPGW cable along with all accessories up to 220 KV transmission line of 2098 Km was submitted to Hon'ble Commission, in the CIP FY 2016-17 and an amount of Rs 60.00 Crs was approved for this purpose. Later on a proposal for providing OPGW cable along with all accessories in the transmission lines of 400 to 132KV level of 4915 KM route length for online real time data communication to main and back up SLDC and other various communication purposes was take up with NLDC for PSDF grant. Accordingly, Rs. 72.96 Crs has been sanctioned as grant by MoP vide letter No. 10/2014-OMdt 27.07.2018. Therefore on total estimated cost of Rs 178.10 Crs, Rs105.14 Crs are to borne by CSPTCL. Rs 60 Crs has already been approved by Hon'ble Commission as stated above. Balance amount of Rs. 45.14 Crs is being proposed through instant petition for approval of Commission.
- ii- A consolidated fund requirement of Rs 50 Crs is being proposed to provide additional transformers/ augmentation of existing transformers in the existing EHV 400, 220, 132KV substations of CSPTCL. This fund shall be utilized in future during FY 2021-22 as per the requirement.
- iii- A consolidated fund requirement of Rs 20 Crs is being proposed for construction of feeder bays in the existing EHV substations of CSPTCL during FY 2021-22 as per the requirement of CSPTCL/CSPDCL.
- iv- A consolidated fund requirement of Rs. 20 Crs for system Improvement Works including expenditure towards installation/commissioning Capacitor Banks, RTU's, Communication equipments, battery, battery chargers, other EHV equipments of S/S, Conductor replacement etc, Survey works, data logging system of EHV S/S and other associated equipment, and Miscellaneous system improvement related with existing/new upcoming substation . This fund shall be utilized as per the future requirement during FY 2021-22 against the subhead as above.

Various system improvement works related with each EHV substations with scheme provision against each are as below:-

SN	Particulars	Scheme Provision in Rs Crs	Completion target	Remarks
1.	Providing OPGW cable along with all accessories in	45.14	Beyond FY 2021-22	Total scheme provision of this work is Rs 178.10 Crs. Grant from PSDF fund has been

	the transmission lines of 400 to 132KV level of 4915 KM route length for online real time data communication to main and back up SLDC and other various communication purposes.			sanctioned amounting to Rs 72.96 Crs. and balance amount Rs. 105.14 Crs shall be meet out by taking loan from financial institution & equity infusion by CSPTCL. Note: Rs 60 Crs has already been sanctioned by Hon'ble CSERC in CIP FY 2016-21 order dated 26.03.2016. Balance amount to the tune of Rs 45.14 CRs are to be approved by Commission for this purpose.
2.	Additional/Augmentation of power transformers in the existing EHV substations	50	During FY 2021-22	To provide additional transformers/ augmentation of existing transformers in the existing EHV 400, 220, 132KV substations of CSPTCL.
3.	Construction of 400/220/132/33 KV feeder bay in the existing substations as per the requirement in future	20	During FY 2021-22	for construction of feeder bays in the existing EHV substations of CSPTCL as per the requirement of CSPTCL/CSPDCL
4	Capacitor Bank, RTU, Communication equipment, smart grid arrangement, battery, battery charger, other EHV equipments, conductor replacement, acquisition of land, survey work, forest clearance, land compensation etc and other miscellaneous system improvement work of existing and upcoming EHV substations.	20	During FY 2021-22	
5	LILO of 132KV Doma-Patan line at 132/33 KV upcoming substation, Amleshwar of 11 KM RL.	11	During FY 2021-22.	132/33 KV substation has already been approved in Addl. CIP FY 2016-21.
	Total	<b>146.14</b>		

#### **New Capital Works:-**

Two no. 132/33KV substation namely at Gullu (Arang) Distt Raipur and at Hanfa (Usalapur) Distt Bilaspur were proposed by CSPTCL during October 2019 as per the requirement of CSPDCL, the same was approved in principle by Hon'ble CSERC and conveyed vide letter dated 29.10.2020 are being proposed below hereunder for regulatory approval as per direction given therein.

SN	Particulars	Capacity in MVA/Route Length/CKTKM	Scheme Provision in Rs Crs
1	132/33KV Substation Gullu (Arang)	2x40 MVA	23.00
	132KV DCDS line from	20 KM RL/40 CKM	22.00

	132KV substation Mathkharora +2 No. 132KV feeder bays at Mathkharora S/S		
25	132/33KV Substation Hanfa (Usalapur)	2x40 MVA	23.00
	132KV LILO of 132KV Chakarabhata-Kota feeder at 132KV substation Hanfa	15 KM RL/30 CKT KM	20.00
		<b>TOTAL</b>	<b>88.00</b>

Accordingly, total scheme provision of capital works and system improvement works proposed through instant petition over & above the scheme provisions approved in CIP FY 2016-17 & additional CIP FY 2016-21 shall be as below:-

SN	Particulars	Scheme Provision in Rs Crs.
1	132KV substation and its associated transmission line	88.00
2	System improvement works	146.14
	<b>Total</b>	<b>234.14 Crs.</b>

#### 8. FUNDING OF CAPITAL WORKS :-

Funding for the proposed capital works shall be met through obtain loan to the tune of 70% of scheme provision proposed against each from PFC/other financial institutions and balance 30% shall be met out through internal resources.

#### 9. CAPITALIZATION OF CAPITAL WORKS:-

Capitalization on capital works shall be considered in the true up petition after approval by Hon'ble CSERC.

#### 10. PRAYER:

CSPTCL requests the Hon'ble Commission to :-

1. Admit & approve the Capital Works proposed under the Capital Investment Plan for the period FY 2021-23.
2. Condone any inadvertent omission/errors/shortcomings and permit the petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date.
3. Allow CSPTCL to submit necessary additional information required by the Commission during the processing of this petition.
4. And pass such other and further order as are deemed fit and proper in facts and circumstances of the case.

**Chief Engineer (C & RA)**  
**CSPTCL: Raipur**



CANCELLED.

FIVE RUPEES

**BEFORE THE CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION RAIPUR**



In the matter of

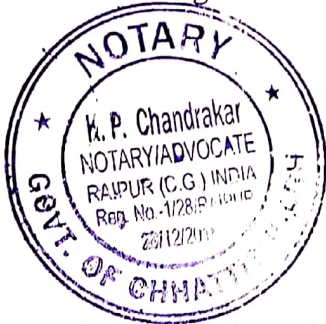
“Petition in respect of CSPTCL for approval of Capital Investment Plan FY 2021-22.”

Chhattisgarh State Power Transmission Co. Ltd.,  
Vidyut Seva Bhavan, Dangania,  
Raipur, 492002.

Petitioner

I Sharda Sonwani W/o Dr Khemraj Sonwani , age about 55 yrs. R/o Vinayaka Vihar, DDU Nagar, Raipur (C.G.) do hereby solemnly affirm and state as follows:

1. I am working as Chief Engineer (Commercial & Regulatory Affairs) CSPTCL: Dangania, Raipur.
2. I am duly authorized representative of the said petitioner and make this affidavit on behalf of CSPTCL.
3. The statements made in application submitted herein are true to best of my knowledge.



(Sharda Sonwani)

On behalf of the Petitioner  
C.G. State Power Transmission Co. Ltd.

**Verification:**

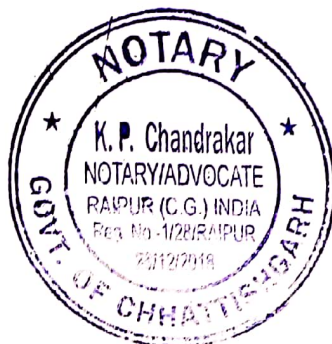
I, do hereby take oath as under that the content of the reply submitted are true and correct to the best of my knowledge.

Verified at Raipur on 1<sup>st</sup> day of January 2021.

(Sharda Sonwani)

01 JAN 2021

*Handwritten:*  
Akash Tiwari  
DDU Nagar MIA-527  
Raipur.



SOLEMNLY AFFIRMED ON  
SWORN BEFORE ME BY  
THE WITHIN NAMED

*Handwritten:*  
Keshav Prasad Chandrakar  
NOTARY/ADVOCATE  
RAIPUR (C.G.)

01 JAN 2021